



Energy Efficiency & Renewable Energy

DOE's Market Introduction Workshop

Market Evolution

November 13, 2014

Dan Chwastyk, Navigant

Speakers

Christopher Brown

Chief Executive Officer



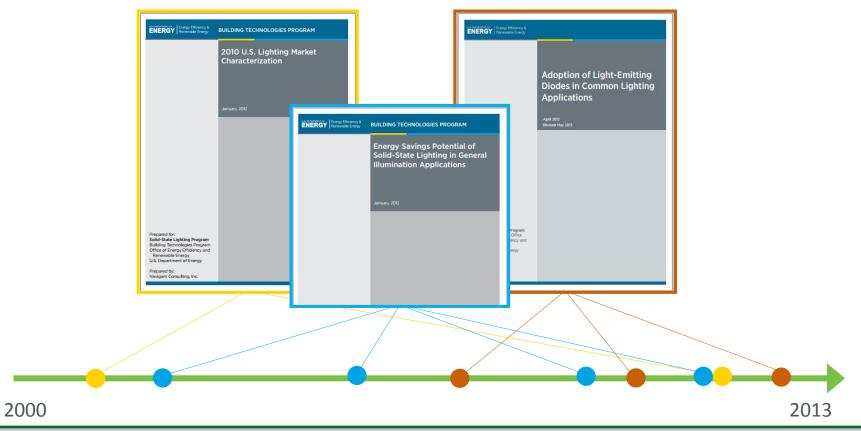
Mark Voykovic

Merchant – Light Bulbs



LED Trends

- Navigant / DOE Research
 - Lighting Market Characterization (2002, 2012)
 - Energy Savings Potential of SSL (2003, 2006, 2010, 2012)
 - Adoption of LEDs in Common Lighting Application (2008, 2011, 2013)



LED Trends



2007

efficacy:

30 lpW

applications:

Traffic Signals, Holiday Lights, Signs, Display Case

energy savings:

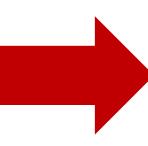
Negligible



2013

efficacy:

76 lpW



applications:

A-type, Downlights, Decorative, Hi/Low Bay ALL

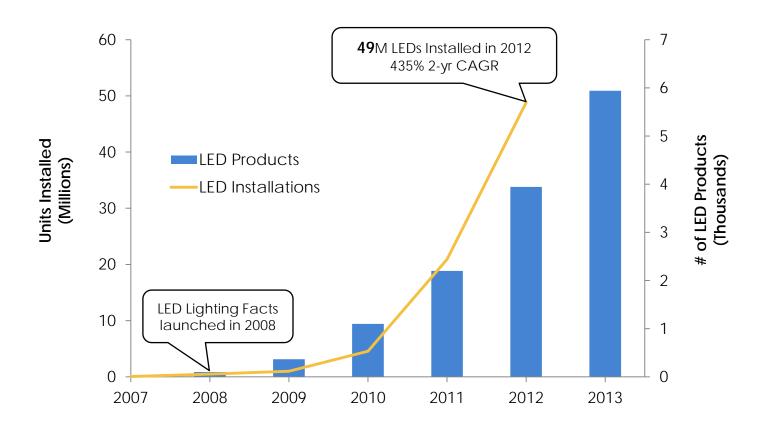
energy savings:

71 tBtu (2012)



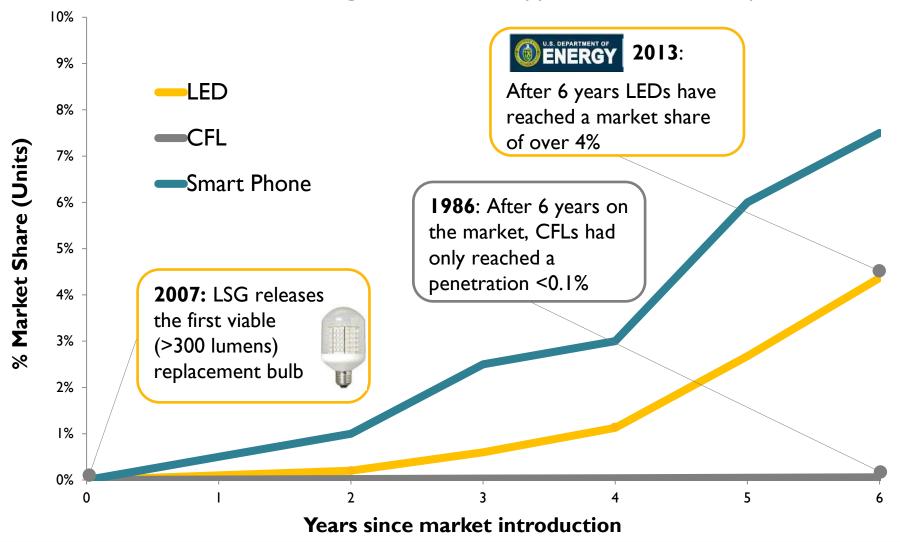
LED Trends

Exponential growth of available products and of installed products.



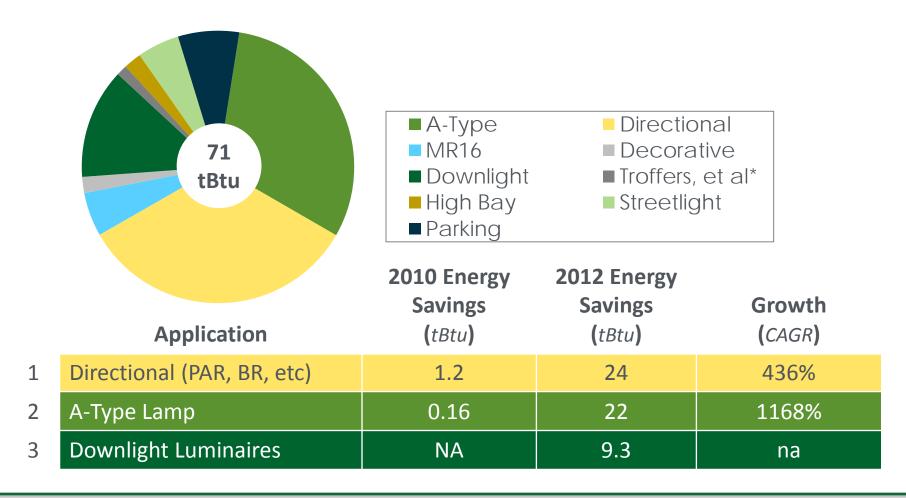
LED Market Growth

Growth is not mimicking that of the typical household product.



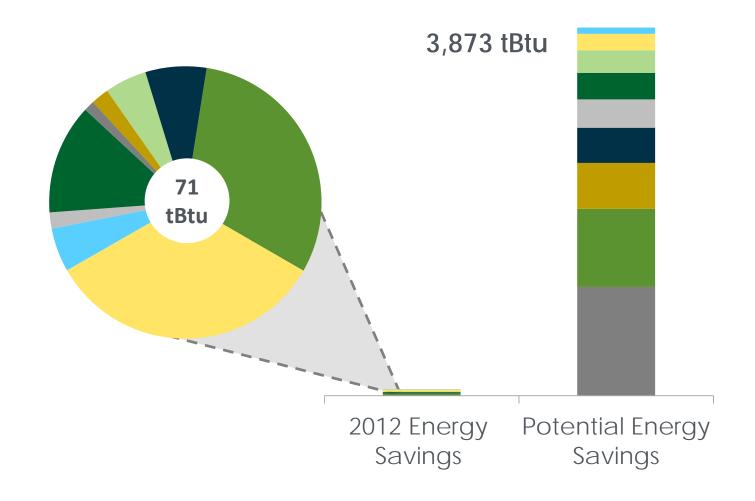
LED Energy Savings

Early energy savings are being realized in traditional residential applications, though penetration is still quite low.



LED Energy Savings

Remarkable potential savings in a wide range of applications.



Thanks

Dan Chwastyk
Associate Director
Navigant, Energy Practice
dan.chwastyk@navigant.com (202) 481-8491

